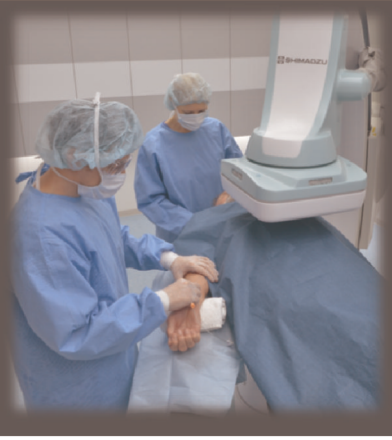
SHIMADZU

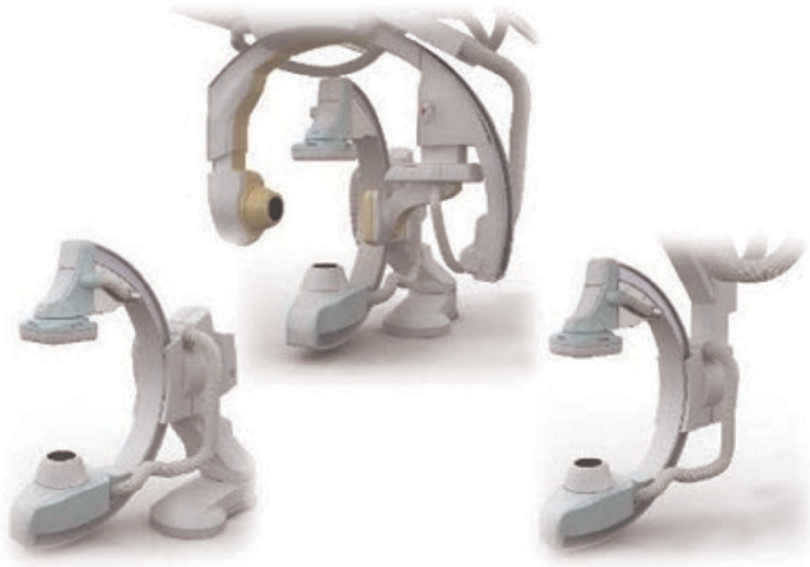
THE IDEAL SOLUTION FOR OUTPATIENT BASED IMAGING

Private practice in a free-standing outpatient center requires personal commitment and investment

Outpatient practices need a partner that is equally committed to their goals and their success that bring solutions to the table

Experienced partners help you to maximize the value of our investment, for single specialty or multi-specialty practices using lower dose setting





SHIMADZU HAS THE EXPERIENCE TO ADD VALUE TO YOUR OBL

Trinias series *unity* edition

The Shimadzu Trinias unity edition provides functionality that supports a multi-specialty practice (outpatient or office-based lab or ambulatory surgery center) with high image quality using lower dose settings

Cardiology Consultants PA

Expertise, efficiency and expediency are the hallmarks of this OBL.

By Valerie Neff Newitt

FIGURE 1. Cardiology Consultants PA OBL staff: Todd Crocker, RT(R); Bailey Faulkner, CVT; Bridget Lemaster, RN, Director of Clinical Operations; Mark Blanton, RN.

When Cardiology Consultants PA opened their office-based lab (OBL) in March 2021, they distinguished their outpatient center from others by virtue of an underlying mindset. "First, we decided we wanted to build something as safe as a hospital experience, and yet more convenient," says Brian Brown, MD. "Our group is a well-established—almost 50 years old—thriving, full-service cardiology practice. I feel fortunate that senior partners Nalin Srivastava, MD, David Ike, MD, and David Rodak, MD, hired me in."

He adds, "The OBL is an adventure, not a necessity for us; we don't live or die by the profits or losses of this venture. That freedom allows us to do things as we really want to, without cutting corners or sacrificing current technologies, to reach our goal of offering a service to our community. I think that really sets us apart."

From the Ground Up

Dr. Brown, with the support of group president Joseph "Joe" Mobley, MD, was the driving force who interested the other members of the 12-doctor cardiac group in the idea of establishing an OBL in Spartanburg, South Carolina. Composed of general cardiologists, interventional cardiologists, electrophysiologists (and a large supporting staff of nurse practitioners, nurses, technicians and office personnel), the group members performed all of their work at hospitals operated by Spartanburg Regional Healthcare System (SRHS).

No one in the group was engaged in vascular work when Dr. Brown joined the practice in 2017, and only a

 ISSN 2767-2913

FIGURE 2. The surgical suite features cutting-edge Shimadzu technology.

few physicians in the area performed all of the local vascular surgeries. Dr. Brown, already trained in vascular procedures, was seeing cardiac patients who were facing amputation, so he contacted their surgeons and offered to attempt revascularization. "These surgeons were extremely busy, and they told me outright they didn't like dealing with critical limb ischemia work. They were happy for me to take it on," he said.

From that beginning, Dr. Brown built relationships with wound-care centers, and went from a second-opinion option to a first-opinion expert. "Everything I did was a surgical turn-down, absolute disasters. But when I showed one good outcome after another, salvaging limbs, the word spread. Then along with wound care center referrals, I started getting referrals from primary care and nephrology offices. Patients would tell others, 'They saved my leg,' and the practice grew," he recalls.

A Growing Demand

Already a busy, fulltime interventional cardiologist with 60 cases a month in the hospital cath lab, Dr. Brown soon found the demand for additional vascular work overwhelming. "So I trained one of our newer physicians, Sebastiano Virgadamo, DO, and together we trained 2 others—Alex Lopez, MD, and Matthew Kalapurakal, MD—in anticipation of opening an OBL."

When the cardiac group had outgrown its existing offices, Dr. Brown advocated for including an outpatient lab in the expansion plans. During a trip to the 2019 Association for Molecular Pathology (AMP) meeting, he spoke to other OBL owners and met Jim Hollenbeck from Spectra Consulting, who became a tremendous resource. Following the conference, "(Jim) would spend hours…discussing the possibilities with me, connecting me with other OBLs that I visited… and created a pro forma."

When Dr. Brown shared the plan with other members of the group, they decided to move ahead slowly, setting a goal of 8 interventional cases a month. "Even at that volume an OBL made financial sense. But guess what? We surpassed that by triple the volume, every month so far."

The OBL now handles peripheral arterial work (mainly critical limb ischemia, but also upper and lower extremity claudicants), and peripheral venous work including vein ablation, venography, treatment of iliac vein stenosis, and occlusion. "We also do implantable loop recorders and transesophageal echocardiograms, cardioversions and Lasix infusions in the office," says Dr. Brown. "The Lasix infusions certainly are not a money-maker, but it is a great service to be able to offer to patients and help them avoid the ER, which so many people are afraid of due to Covid."

 ISSN 2767-2913

With his own professional schedule continuing to include high-risk coronary cases at area hospitals, Dr. Brown says about 50% of his professional efforts have transitioned to peripheral work at the OBL. "That is now my specialty," he adds. And that area of his expertise is assisted by the state-of-the-art technology they've installed at the OBL.

Cutting-Edge Technology

"Our architect designed a large room for our fluoroscopy lab. As we started looking at available technology, Shimadzu came out as a shining star, and we forged a great partnership with their southeast distributor, CMS. Shimadzu has a fabulous product built-in called Trinias f12, which has a great table and a huge monitor. We've mirrored that monitor on three walls with 65-inch television screens. Anyone in the room, anywhere, can see what's going on, whether it's angiography or hemodynamics. I'm very proud of that," says Dr. Brown. "It's now my favorite lab to work in."

One of the special things he appreciates about the Shimadzu instrumentation is the power of its real-time smooth masking (RSM), compared to digital subtraction angiography (DSA) imaging. "With traditional DSA you take images segmentally down the leg during a peripheral vascular intervention case. If someone moves, you have to retake that image," explains Dr. Brown. "However, RSM allows you to get a DSA-like image that's beautiful, while the person is moving. So, I'll do runoffs and I'll pan the camera back and forth down the leg to get different angles and even physically move the leg as we're panning down the table. It just makes for a much better experience; I no longer have to redo a shot if I don't like it."

Additional technology in the OBL includes a built-in Philips IVUS unit. "It's very quick and easy to run an IVUS for arterial or venous interventional cases. This makes cases a lot safer and more precise, especially in the OBL setting, keeping us from oversizing or undersizing a balloon or stent," says Dr. Brown. "We use mainly Medtronic products for interventional work. We've worked out a partnership with Medtronic to be able to offer the same level of care we offer in the hospital, right in our own lab – atherectomy with a directional atherectomy device, using a filter to keep the procedure safe and using drug-coated balloons to increase patency." That algorithm is not common in OBLs, he says. "We stent if necessary, but we avoid stenting when it's not needed."

The OBL uses a hemodynamics unit from Fysicon. "It documents a patient's journey from arrival in the pre-procedure area to procedure room and back. It tracks hemodynamics throughout, clinical updates, and devices used. Additionally, it offers a great safety feature: end-tidal CO_2 monitoring," details Dr. Brown.

FIGURE 3. The Cardiology Consultants PA holding area.

"Our PACS system from Scimage seamlessly takes all of our fluoroscopy and other clinical imaging and pairs them with the procedural data tracked by the Fysicon hemodynamics system to help us create our clinical reports. There is nothing lacking in our lab," says Dr. Brown confidently. "They've already run their first Medtronic preceptorship, during which visiting physicians were able to observe 5 cases and learn how to use the various products.

Cardiology Consultants PA maintains close ties with their hospital partner SRHA, and their OBL has provided additional value during this trying COVID-19 era. "A surgeon called on a morning in September and said, 'Brian, I have a patient I need to admit, but we have no beds.' The hospital was quite full of COVID patients at the time," recalls Dr. Brown, noting *The Washington Post* reported at the time that Spartanburg County had the highest COVID hospital rate in the entire country.

"The surgeon, who said the patient needed revascularization in order to keep her to a limited amputation, was really worried about her condition and asked me what I might be able to do. I got the patient's information, called her, brought her in, and sure enough she had a gangrenous wound and multi-level occlusion. She was agreeable to moving forward with peripheral angiography and endovascular revascularization. We provided her with excellent care that very day. Being able to do all of that in the course of just one day, during a pandemic, is incredible. It's fantastic for everyone involved."

That's the beauty of OBLs. "We can provide efficient, high-quality care in an outpatient setting during a time when hospitals may lack adequate lab space or staff to get the work done," says Dr. Brown.

 ISSN 2767-2913